

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS ✓
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

D E C L A R A T I O N

As a below named inventor(s), I (we) hereby declare that:

My (our) residence, post office address and citizenship are as stated below next to my (our) name;

I (we) believe I (we) am (are) the original, first and sole inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled: A NEW APPROACH TO AVOID BUCKLING IN BPSG BY USING AN INTERMEMBRANE BARRIER LAYER; the specification of which is attached hereto;

I (we) hereby state that I (we) have reviewed and understand the contents of the above identified specification, including the claims;

I (we) acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations Section 1.56(a);

I (we) hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign applications(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed;

I (we) hereby claim the benefit under Title 35, United States Code Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I (we) acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application;

I (we) hereby declare that all statements made of my (our) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon;

POWER OF ATTORNEY: As a named inventor, I appoint the following as attorney(s)/agent(s) to transact all business in the Patent and Trademark Office for this application, Angus C. Fox, III, (Registration #31,828), Stanley N. Protigal, (Registration #28,657), David J. Paul (Registration No. 34,692), Susan B. Collier (Registration No. 34,566), Lia M. Pappas (Registration No. 34,095), Michael W. Starkweather (Registration #34,441), William R. Bachand (Registration No. 34,980), Ozer M. N. Teitelbaum (Registration No. P36, 698).

Send Correspondence to: Ozer M. N. Teitelbaum, Patent Attorney  
Micron Semiconductor, Inc.  
2805 East Columbia Road  
Boise, Idaho 83706  
Tel. 208-368-4543

Inventor's Full Name: Trung T. Doan  
(First) (MI) (Last)

Inventor's Signature: Tony Trung Date: 3/17/93

Citizenship: United States of America

Post Office Address: 1574 Shenandoah Drive

Boise, Idaho 83712-6668

City, State and  
Country of Residence Boise, Idaho, United States of America

Inventor's Full Name: Randhir P. S. Thakur  
(First) (MI) (Last)

Inventor's Signature: Ram Thakur Date: 3-17-93

Citizenship: India

Post Office Address: 1594 Riverstone Lane

Boise, Idaho 83706

City, State and  
Country of Residence Boise, Idaho, United States of America

Inventor's Full Name: Yauh-Ching Liu  
(First) (MI) (Last)

Inventor's Signature: Yauh-Ching Liu Date: 3/19/93

Citizenship: Taiwan, Republic of China

Post Office Address: 9226 West Susan Street

Boise, Idaho 83704

City, State and  
Country of Residence Boise, Idaho, United States of America

87053

RECORDATION FORM COVER SHEET  
**PATENTS ONLY**

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office.

Mr. \_\_\_\_\_ Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

conveying party(ies):

Jag T. Doan  
Adhir P.S. Thakur  
Luh-Ching Liu

nal name(s) of conveying party(ies) attached?  Yes  No

ture of conveyance:

Assignment  Merger  
Security Agreement  Change of Name  
Other \_\_\_\_\_

tion Date: 03/17-19/93

2. Name and address of receiving party(ies):

Name: Micron Semiconductor, Inc.

Internal Address: Patent Department, MS 507

Street Address: 2805 E. Columbia Rd.

City: Boise State: ID ZIP: 83706

Additional name(s) & address(es) attached?  Yes  No

ication number(s) or patent number(s):

document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

Patent Application No.(s)

visional of Serial No.: 08/034,339  
cket 92-321.1

B. Patent No.(s)

Additional numbers attached?  Yes  No

and address of party to whom correspondence concerning document should be mailed:

Lia M. Pappas

6. Total number of applications and patents involved: 1

al Address: Patent Department

MS 507

7. Total fee (37 CFR 3.41): ..... \$ 40.00

Enclosed

Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

ent and signature.

test of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy  
original document.

Lia M. Pappas  
Name of Person Signing

RECORDATION FORM COVER SHEET  
PATENTS ONLY

Honorable Commissioner of Patents and Trademarks:  
please record the attached original documents or copy thereof.

Name(s) of conveying party(ies):

Trung T. Doan  
Randhir P.S. Thakur  
Yauh-Ching Liu

2. Name and address of receiving party:

Micron Semiconductor, Inc.  
2805 E. Columbia Rd. MS 507  
Boise, ID 83706-9698

3. Nature of conveyance:

OTHER: CORRECTIVE ASSIGNMENT  
REEL: 6574  
FRAME: 0073

Execution Date: 1-24-94

[ ] Additional name(s) and address(es) attached

4. Application number(s) or patent number(s):  
If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application Number(s)

B. Patent Number(s)

Related to Application  
Serial Number: 08/034,339  
Filing Date: March 19, 1993  
Docket Number: 92-321

[ ] Additional numbers attached

[ ] Additional numbers attached

5. Name and address of party to whom correspondence concerning this document should be mailed:

William R. Bachand  
Micron Semiconductor, Inc.  
2805 East Columbia Rd. MS 507  
Boise, ID 83706-9698

6. Total number of applications and patents involved: 1

7. Total Fee (37 CFR 1.22(h))

Authorized to be charged to deposit account.

8. Deposit account number: 13-3092

A duplicate of this page is enclosed.

91767199

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

William R. BACHAND

Print name of person signing

Signature

Date

Total number of pages comprising cover sheet: 1

DT

APPLICATION FORM COVER SHEET  
U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

**PATENTS ONLY**

MAIL

400  
1384

U.S. TRADE MARK OFFICE

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

Name of conveying party(ies):

Doan  
Randhir P.S. Thakur  
Yauh-Ching Liu

ional name(s) of conveying party(ies) attached?  Yes  No

ature of conveyance:

Assignment  Merger  
 Security Agreement  Change of Name  
 Other

action Date: 3/19/93

2. Name and address of receiving party(ies):

Name: Micron Semiconductor Inc

Internal Address: MS # 507

Street Address: 2805 E. Columbia Rd.

City: Boise State: ID ZIP: 83706

Additional name(s) & address(es) attached?  Yes  No

pplication number(s) or patent number(s):

This document is being filed together with a new application, the execution date of the application is: 3/19/93

A. Patent Application No.(s)

Attached Application  
Docket #92-321

B. Patent No.(s)

Additional numbers attached?  Yes  No

Name and address of party to whom correspondence concerning document should be mailed:

Name: Ozer M.N. Teitelbaum

Internal Address: MS # 507

Patent Department

Street Address: 2805 E. Columbia Rd

City: Boise State: Id ZIP: 83706

RECEIVED  
54 APR 25 PM 250  
ASSIGNMENT BRANCH

6. Total number of applications and patents involved:

7. Total fee (37 CFR 3.41): \$ \_\_\_\_\_

Enclosed

Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

AP 9334 18 68

lement and signature.

The best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

081034339  
R B 8639 38493

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Trung T. Doan  
Randhir P.S. Thakur  
Yauh-Ching Liu

) Docket No.: 92-321

) Group Art Unit:

) Examiner:

Serial No.:

Filed: Concurrently herewith

For: A NEW APPROACH TO AVOID  
BUCKLING IN BPSG BY USING  
AN INTERMEDIATE BARRIER  
LAYER

ASSIGNMENT:

Enclosed for recording

Previously recorded

Date: \_\_\_\_\_

Reel: \_\_\_\_\_

A S S I G N M E N T

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

*Y.C. Liu 1/24/94 Mon 1-24-94 R101 1-13-94*

SELL, ASSIGN AND TRANSFER to ~~Micron~~ Semiconductor, Inc. (the "Assignee"), a corporation of ~~Delaware~~, having a place of business at 2805 E. Columbia Road, Boise, Idaho 83706, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled: **A NEW APPROACH TO AVOID BUCKLING IN BPSG BY USING AN INTERMEDIATE BARRIER LAYER;** such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

6574

00100

APR 11 1994  
U.S. PATENT & TRADEMARK OFFICE  
SEARCHED INDEXED  
FILED

6574

0076

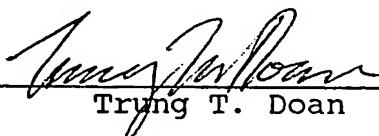
AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

(Signature)



Trung T. Doan

Date: 3/17/93

(Signature)



Randhir P.S. Thakur

Date: 3-17-93

6574

0077

SEARCHED INDEXED  
SERIALIZED FILED

(Signature)

Yauh-Ching Liu

Date: 3/19/93

STATE OF IDAHO )  
                  ) ss.  
County of Ada )

BEFORE ME, this 19 day of March 1993  
personally appeared the above-named individual(s), to me known to  
be the person(s) who is (are) described in and who executed the  
foregoing assignment instrument and acknowledged to me that he/she  
(they) executed the same of his/her (their) own free will for the  
purpose therein expressed.

SEAL

Deanne Schildan  
Notary or Consular Officer  
My Commission Expires: 6/27/96

NAME  
6574 0078

U.S. PATENT & TRADEMARK OFFICE

RECD  
TM OFFICE  
FEB -7 94

RECORDED  
PATENT & TRADEMARK OFFICE  
MAR 19 93